



(REFERENCE COPY - Not for submission)

FCC Form 399: Incentive Auction Relocation Reimbursement Fund System

File Number: **0000028782** | FRN: **0002107274** | Facility ID: **65670**
Repack Channel: **14 (UHF)** | Entity: **Broadcaster** | Filing Status: **Submitted**
Date Submitted: **09/28/2017**

Applicant Information

Applicant Name, Type, and Contact Information

| Applicant | Address | Phone | Email | Applicant Type |
|--|---|-------------------|-------------------|----------------|
| GREATER WASHINGTON EDUCATIONAL TELECOMMUNICATIONS ASSOC Doing Business As: GREATER WASHINGTON EDUCATIONAL TELECOMMUNICATIONS ASSOC | Legal & Business Affairs Dept. 3939 Campbell Ave Arlington, VA 22206 United States | +1 (703) 998-2851 | LDELANEY@WETA.ORG | Not-for-Profit |

Reimbursement Contact Information

Reimbursement Contact Name and Information

| Applicant | Address | Phone | Email |
|----------------|---------|-------|-------|
| [Confidential] | | | |

Preparer Contact Information

Preparer Contact Name and Information

| Applicant | Address | Phone | Email |
|---|--|-------------------|------------------------|
| Joseph L. Snelson , Jr . <i>Technical Consultant</i> <i>Meintel, Sgrignoli & Wallace</i> | 1282 Smallwood Drive, Suite 372 Waldorf, MD 20603 United States | +1 (303) 344-8037 | joe.snelson@mswdtv.com |

Broadcaster Information and Transition Plan

| Question | Response |
|--|---|
| Will the station be sharing equipment with another broadcast television station or stations (e.g., a shared antenna, co-location on a tower, use of the same transmitter room, multiple transmitters feeding a combiner, etc.)? If yes, enter the facility ID's of the other stations and click 'prefill' to download those stations' licensing information. | Yes |
| Briefly describe transition plan | WETA proposes to build its repack facility on channel 31 and will be sharing its main antenna, transmission line and combiner with two other parties. See the attached updated narrative for the background and details of its transition plan. |

| Question | Response |
|---------------------------------------|--|
| Sharee Station Facility ID | 74091 |
| Call Sign | WPXW-TV |
| Type | Commercial |
| Licensee Name | ION MEDIA WASHINGTON LICENSE, INC. |
| Status | LICENSED |
| DTS (Distributed Transmission System) | No |
| Community of License | MANASSAS, VA |
| Pre-auction RF Channel | 34 |
| Post-auction RF Channel | 35 |
| Neilsen DMA | Washington DC (Hagrstwn) |
| Network Affiliation | |

| Question | Response |
|---------------------------------------|--------------------------|
| Sharee Station Facility ID | 65593 |
| Call Sign | WUSA |
| Type | Commercial |
| Licensee Name | WUSA-TV, INC. |
| Status | LICENSED |
| DTS (Distributed Transmission System) | No |
| Community of License | WASHINGTON, DC |
| Pre-auction RF Channel | 9 |
| Post-auction RF Channel | 9 |
| Neilsen DMA | Washington DC (Hagrstwn) |
| Network Affiliation | |

| Question | Response |
|--|---------------------------|
| Sharee Station Facility ID | 27772 |
| Call Sign | WHUT-TV |
| Type | Noncommercial Educational |
| Licensee Name | HOWARD UNIVERSITY |
| Status | LICENSED |
| DTS (Distributed Transmission System) | No |
| Community of License | WASHINGTON, DC |

| Pre-auction RF Channel | 33 |
|---------------------------------------|--------------------------|
| Post-auction RF Channel | 33 |
| Neilsen DMA | WASHINGTON DC (HAGRSTWN) |
| Network Affiliation | |
| Question | Response |
| Sharee Station Facility ID | 1051 |
| Call Sign | WJLA-TV |
| Type | Commercial |
| Licensee Name | ACC LICENSEE, LLC |
| Status | LICENSED |
| DTS (Distributed Transmission System) | No |
| Community of License | WASHINGTON, DC |
| Pre-auction RF Channel | 7 |
| Post-auction RF Channel | 7 |
| Neilsen DMA | Washington DC (Hagrstwn) |
| Network Affiliation | |

Transmitters

| Section | Question | Response |
|------------------------------|---|----------|
| Transmitter Related Expenses | Do you have transmitter related expenses? | Yes |

**Auxiliary
Transmitter****Add Transmitter Information**

| Section | Question | Response |
|---|--|---|
| Existing Transmitter Description | Type of change | Purchase New |
| | Use | Auxiliary (Backup) |
| | Description of Use | Alternate Site backup transmitter |
| | Ownership | Owned |
| | Owner | |
| | Site | |
| | Is this transmitter currently shared with another station? | No |
| | Is this transmitter currently in operating condition? | Yes |
| Existing Transmitter Manufacturer and Type | Manufacturer | |
| | Model | CD100P1 |
| | Year | 1997 |
| | Type | Inductive Output Tube |
| | IOT Power Type | Single |
| | Description | |
| | Power capacity | 17.5 kw |
| | Solid State Cooling | |
| | Solid State Power Capacity | |
| | Other Transmitter Type | |

**Auxiliary
Transmitter**

New Transmitter Costs

| Section | Question | Response |
|------------------------|---|---|
| New Transmitter | Use | Auxiliary (Backup) |
| | Description of Use | Alternate Site backup transmitter |
| | Change Type | Purchase New |
| | Is this a request for upgraded equipment? | Yes |
| | Manufacturer | |
| | Model | ULXTE-20 |
| | Transmitter Type | Solid state |
| | IOT Power Type | |
| | Other | |
| | Power capacity | |
| | Solid State Cooling | Liquid |
| | Solid State Power Capacity | 12.9 kw |
| | Other Transmitter Type | |
| | Justification for New Transmitter | See attached letter from manufacturer regarding IOT transmitters. |

**Auxiliary
Transmitter**

Other Transmitter Costs

| Section | Question | Response |
|---------------------------|---------------------------------------|----------|
| Electrical Service | Service Entrance (3 phases 800A 208V) | No |
| | Switchgear (industrial 800 amp) | No |
| | | |

| | | |
|--|---|--|
| | Transformer (480V) | No |
| | Power | |
| | Rigid Conduit and Wiring | No |
| | Size | |
| | Length | |
| | Other Electrical Service | Yes |
| | Description | Electrical contractor to connect transmitter into existing electrical panel and wire heat exchanger into transmitter. Includes material and labor. |
| HVAC Service | Does the replacement transmitter require HVAC Service? | No |
| | Type | |
| | Size | |
| | Other Size | |
| Transmitter Building Addition/Modification or Leasehold Improvement | Does the Transmitter Building require an addition, modification, other leasehold improvement? | Yes |
| | Size | 600.0 square feet |
| Channel 14 Costs | Is an RF Consulting Engineer needed? | No |
| | Is a channel 14 Mask Filer needed? | No |
| | Is additional field engineering time needed? | No |
| | Number of Days | |

| | |
|--------------------|--|
| Auxiliary | Other Transmitter Cost Not Listed |
| Transmitter | Information not provided. |

**Auxiliary
Transmitter****Add Transmitter Information**

| Section | Question | Response |
|---|---|--|
| Existing Transmitter Description | Type of change | Purchase New |
| | Use | Auxiliary (Backup) |
| | Description of Use | Used in case of failure of main |
| | Ownership | Owned |
| | Owner | |
| | Site | |
| | Is this transmitter currently shared with another station? | No |
| | Is this transmitter currently in operating condition? | Yes |
| Existing Transmitter Manufacturer and Type | Manufacturer | |
| | Model | DHD15P1 |
| | Year | 2003 |
| | Type | Solid state |
| | IOT Power Type | |
| | Description | |
| | Power capacity | |
| | Solid State Cooling | Air |
| | Solid State Power Capacity | 3.6 kw |
| | Other Transmitter Type | |

**Auxiliary
Transmitter**

New Transmitter Costs

| Section | Question | Response |
|-----------------|---|---------------------------------------|
| New Transmitter | Use | Auxiliary (Backup) |
| | Description of Use | Used in case of failure of main |
| | Change Type | Purchase New |
| | Is this a request for upgraded equipment? | Yes |
| | Manufacturer | |
| | Model | ULXTE-90 |
| | Transmitter Type | Solid state |
| | IOT Power Type | |
| | Other | |
| | Power capacity | |
| | Solid State Cooling | Liquid |
| | Solid State Power Capacity | 56.4 kw |
| | Other Transmitter Type | |
| | | |

| | | |
|--|-----------------------------------|--|
| | Justification for New Transmitter | See attached letter from GatesAir regarding inability to retune current transmitter. See revised narrative. Replacement upgrade is part of a multi-station resolution that includes moving WETA's repack channel from 14 to 31 at an ERP of 1000 kW. |
|--|-----------------------------------|--|

Auxiliary Transmitter

Other Transmitter Costs

| Section | Question | Response |
|--------------------|--|------------|
| Electrical Service | Service Entrance (3 phases 800A 208V) | No |
| | Switchgear (industrial 800 amp) | No |
| | Transformer (480V) | No |
| | Power | |
| | Rigid Conduit and Wiring | Yes |
| | Size | 4 inches |
| | Length | 420.0 feet |
| | Other Electrical Service | No |
| | Description | |
| HVAC Service | Does the replacement transmitter require HVAC Service? | No |

| | | |
|--|---|----|
| | Type | |
| | Size | |
| | Other Size | |
| Transmitter Building Addition/Modification or Leasehold Improvement | Does the Transmitter Building require an addition, modification, other leasehold improvement? | No |
| | Size | |
| Channel 14 Costs | Is an RF Consulting Engineer needed? | No |
| | Is a channel 14 Mask Filer needed? | No |
| | Is additional field engineering time needed? | No |
| | Number of Days | |

Auxiliary Transmitter **Other Transmitter Cost Not Listed**
Information not provided.

**Primary
Transmitter**

Existing Transmitter Information

| Section | Question | Response |
|---|--|-------------------|
| Existing Transmitter Description | Type of change | Purchase New |
| | Use | Primary (Main) |
| | Description of Use | |
| | Ownership | Owned |
| | Owner | |
| | Site | |
| | Is this transmitter currently shared with another station? | No |
| | Is this transmitter currently in operating condition? | Yes |
| Existing Transmitter Manufacturer and Type | Manufacturer | |
| | Model | DHD15P1 |
| | Year | 2003 |
| | Type | Solid state |
| | IOT Power Type | |
| | Description | |
| | Power capacity | |
| | Solid State Cooling | Air |
| | Solid State Power Capacity | 3.6 kw |
| | Other Transmitter Type | |

Primary Transmitter

New Transmitter Costs

| Section | Question | Response |
|-----------------|---|----------------|
| New Transmitter | Use | Primary (Main) |
| | Description of Use | |
| | Change Type | Purchase New |
| | Is this a request for upgraded equipment? | Yes |
| | Manufacturer | |
| | Model | ULXTE-90 |
| | Transmitter Type | Solid state |
| | IOT Power Type | |
| | Other | |
| | Power capacity | |
| | Solid State Cooling | Liquid |
| | Solid State Power Capacity | 56.4 kw |
| | Other Transmitter Type | |

| | | |
|--|-----------------------------------|--|
| | Justification for New Transmitter | See attached letter from GatesAir regarding inability to retune current transmitter. See revised narrative. Replacement upgrade is part of a multi-station resolution that includes moving WETA's repack channel from 14 to 31 at an ERP of 1000 kW. |
|--|-----------------------------------|--|

Primary Transmitter

Other Transmitter Costs

| Section | Question | Response |
|---------------------------|--|------------|
| Electrical Service | Service Entrance (3 phases 800A 208V) | No |
| | Switchgear (industrial 800 amp) | Yes |
| | Transformer (480V) | Yes |
| | Power | 500 kVA |
| | Rigid Conduit and Wiring | Yes |
| | Size | 4 inches |
| | Length | 420.0 feet |
| | Other Electrical Service | No |
| | Description | |
| HVAC Service | Does the replacement transmitter require HVAC Service? | Yes |

| | | |
|--|---|---------------------|
| | Type | Heating and Cooling |
| | Size | 50 tons |
| | Other Size | |
| Transmitter Building Addition/Modification or Leasehold Improvement | Does the Transmitter Building require an addition, modification, other leasehold improvement? | Yes |
| | Size | 1000.0 square feet |
| Channel 14 Costs | Is an RF Consulting Engineer needed? | No |
| | Is a channel 14 Mask Filer needed? | No |
| | Is additional field engineering time needed? | No |
| | Number of Days | |

Primary Transmitter

Other Transmitter Cost Not Listed

| Name | Description |
|--------------------------------|---|
| Pre-installation survey | Site Survey by GatesAir of main and aux transmitter sites for transmitter layout. |

Antennas

| Section | Question | Response |
|--------------------------|---------------------------------------|----------|
| Antenna Related Expenses | Do you have antenna related expenses? | Yes |

**Primary
Antenna****Existing Antenna Information**

| Section | Question | Response |
|---|--|---|
| Existing Antenna Description | Type of change | Retune Existing |
| | Antenna Use | Primary (Main) |
| | Description of Use | N/A |
| | Ownership | Leased |
| | Owner | District of Columbia Joint Tower Venture |
| | Site | N/A |
| | Is the existing antenna shared with another station or stations? | Yes |
| | Is the existing antenna directional? | No |
| | Is antenna in operating condition? | Yes |
| | Is antenna located on or in close proximity to an antenna farm? | Yes |
| Existing Antenna Manufacturer and Type | Class | Full Power |
| | Mounting | Top-mount stacked |
| | Antenna position in stack | Top |
| | Polarization | Horizontal |
| | Type | Broadband Panel |
| | Number of Stations Supported | 3 |
| | Number of Panels | 48 |

| | |
|---------------------------------|-------------|
| Design power capacity in use | 47.0 % |
| Lower Limit | 470.00 MHz |
| Upper Limit | 860.00 MHz |
| Other Antenna Type | N/A |
| ERP: (Effective Radiated Power) | 73.00 kW |
| Manufacturer | DIE |
| Model | TUP-04-12-2 |
| Year | 1999 |

Facility ID's and Call Signs of all stations with whom the antenna is shared.

| Facility ID | Call Sign |
|-------------|-----------|
| 27772 | WHUT-TV |
| 74091 | WPXW-TV |

Primary Antenna

Adjustment to Existing Antenna

| Section | Question | Response |
|---------------------------------------|---|----------|
| Sweep Test of Existing Antenna | Do you need a sweep test of existing antenna? | Yes |

Primary Antenna

Other Antenna Costs

| Section | Question | Response |
|------------------------------------|--|------------|
| Combiner for Shared Antenna | Do you need a Combiner for a Shared Antenna? | Yes |
| | Type | New |
| | Number of channels supported | 3 |
| | Frequencies of channels supported | RF channel |
| | Frequency | N/A |

Enter a list of RF channel numbers.

| RF Channel Number |
|-------------------|
| 31 |
| 33 |
| 35 |

Primary
Antenna

Other Antenna Cost Not Listed
Information not provided.

**Auxiliary
Antenna****Add Antenna Information**

| Section | Question | Response |
|---|--|--------------------------|
| Existing Antenna Description | Type of change | Purchase New |
| | Antenna Use | Auxiliary (Backup) |
| | Description of Use | Alternate site backup |
| | Ownership | Owned |
| | Owner | N/A |
| | Site | N/A |
| | Is this antenna currently shared with any other stations? | No |
| | Is this antenna directional? | No |
| | Is antenna in operating condition? | Yes |
| | Is antenna located on or in close proximity to an antenna farm? | No |
| Existing Antenna Manufacturer and Type | Class | Full Power |
| | Mounting | Side-mount |
| | Antenna position in stack | Not in Stack |
| | Polarization | Horizontal |
| | Type | Slotted coaxial |
| | Number of Stations Supported | N/A |
| | Number of Panels | N/A |
| | Design power capacity in use | N/A |
| | Lower Limit | N/A |
| | Upper Limit | N/A |
| | Other Antenna Type | N/A |
| | ERP: (Effective Radiated Power) | 30.00 kW |

| | |
|--------------|--------------|
| Manufacturer | |
| Model | TFU-8JST-R03 |
| Year | 1998 |

**Auxiliary
Antenna****New Antenna Costs**

| Section | Question | Response |
|--|---|--|
| New Antenna Description | Use | Auxiliary (Backup) |
| | Description of Use | See attached Buget Justification: Auxiliary Transmitter Site |
| | Change Type | Purchase New |
| | Is this a request for upgraded equipment? | No |
| | Ownership | Owned |
| | Owner | N/A |
| | Is antenna shared? | No |
| | Is antenna directional? | No |
| | Will antenna be located on or in close proximity to an antenna farm? | No |
| | | |
| New Antenna Manufacturer and Type | Class | Full Power |
| | Mounting | Side-mount |
| | Antenna position in stack | Not in Stack |
| | Polarization | Horizontal |
| | Type | Slotted coaxial |
| | Number of Stations Supported | N/A |
| | Number of Panels/Bays | N/A |
| | Lower Limit | N/A |
| | Upper Limit | N/A |
| | Design power capacity in use | N/A |
| | Other Antenna Type | N/A |

| | |
|--|--|
| ERP: (Effective Radiated Power) | 20.00 kW |
| Manufacturer | |
| Model | TFU-8JSC-RO3 |
| Year | 2018 |
| Justification for New Antenna | Current antenna is tuned to channel 27 and cannot be retuned to operate on channel 31. |

Auxiliary Antenna

Other Antenna Costs

| Section | Question | Response |
|------------------------------------|---|----------------|
| Combiner for Shared Antenna | Do you need a Combiner for a Shared Antenna? | No |
| | Type | |
| | Number of channels supported | N/A |
| | Frequencies of channels supported | N/A |
| | Frequency | N/A |
| | Do you need a combiner output splitter /switcher for dual feed lines? | N/A |
| Elbow Complex | Do you require the separate purchase of the Elbow Complex? | Yes |
| | Broadband or Single Channel? | Single Channel |
| | Feed Line Size | 3 1/8 inches |
| Side Mount Brackets | Do you require the separate purchase of side mount brackets for a high power antenna? | Yes |

| | | |
|---------------------------------|---|-----|
| Pattern Scatter Analysis | Do you require separate purchase of pattern scatter analysis for a side mount high or medium power antenna? | Yes |
| Sweep Test | Do you require the sweep testing of transmission line and antenna? | Yes |

Auxiliary Antenna

Other Antenna Cost Not Listed

Information not provided.

**Transmission
Line**

| Section | Question | Response |
|---------------------------------------|---|----------|
| Transmission Line Related Expenses | Do you have transmission line related expenses? | Yes |

**Auxiliary
Transmission
Line**

Add Transmission Line

| Section | Question | Response |
|---|---|----------------------------------|
| Existing Transmission Line Description | Type of change | Purchase New |
| | Use | Auxiliary (Backup) |
| | Description of Use | Alternate Transmitter Site |
| | Ownership | Owned |
| | Owner | N/A |
| | Site | N/A |
| | Is this transmission currently shared with any other stations? | No |
| | Is Transmission Line in operating condition? | Yes |
| Existing Transmission Line Manufacturer and Type | Manufacturer | |
| | Type | Rigid |
| | Diameter | 3 1/8 inches |
| | Segment Length | 19 ½ ' |
| | Other Segment Length | |
| | Number of parallel runs | 1 |
| | Length | 521 feet per run |

**Auxiliary
Transmission
Line**

New Transmission Line

| Section | Question | Response |
|--|---|--|
| New Transmission Line Costs | Use | Auxiliary (Backup) |
| | Description of Use | Off site backup |
| | Change Type | Purchase New |
| | Is this a request for upgraded equipment? | No |
| | Type | Rigid |
| | Diameter | 3 1/8 inches |
| | Segment Length | 20' |
| | Other Segment Length | |
| | Number of parallel runs | 1 |
| | Length | 550 feet per run |
| | Justification for New Transmission Line | See revised attached budget narrative. Line is not of standard length. Ability to support temporary operations reliably while main site is being converted to channel 31 is questionable. There is a high risk of failure. |

| Auxiliary Transmission Line | Other Transmission Line Expenses Not Listed |
|-----------------------------------|---|
| | Information not provided. |

**Primary
Transmission
Line**

Add Transmission Line

| Section | Question | Response |
|---|--|------------------|
| Existing Transmission Line Description | Type of change | Purchase New |
| | Use | Primary (Main) |
| | Description of Use | N/A |
| | Ownership | Owned |
| | Owner | N/A |
| | Site | N/A |
| | Is this transmission currently shared with any other stations? | No |
| | Is Transmission Line in operating condition? | Yes |
| Existing Transmission Line Manufacturer and Type | Manufacturer | |
| | Type | Rigid |
| | Diameter | 3 1/8 inches |
| | Segment Length | 20' |
| | Other Segment Length | |
| | Number of parallel runs | 1 |
| | Length | 170 feet per run |

**Primary
Transmission
Line**

New Transmission Line

| Section | Question | Response |
|------------------------------------|---|--|
| New Transmission Line Costs | Use | Primary (Main) |
| | Description of Use | N/A |
| | Change Type | Purchase New |
| | Is this a request for upgraded equipment? | Yes |
| | Type | Rigid |
| | Diameter | 6 1/8 inches |
| | Segment Length | 20' |
| | Other Segment Length | |
| | Number of parallel runs | 1 |
| | Length | 170 feet per run |
| | Justification for New Transmission Line | Current line will not support higher power level to meet ERP determined from multi-station resolution. |

**Primary
Transmission
Line**

Other Transmission Line Expenses Not Listed

| Name | Description |
|---------------------|---|
| Installation | Estimated removal of current line and installation of new. installation |

Tower Equipment And Rigging Costs

| Section | Question | Response |
|--|---|----------|
| Tower Equipment or Rigging Costs Changes | Do you have tower equipment or rigging costs changes? | Yes |

Auxiliary Tower

Add Tower

| Section | Question | Response |
|--|---|-------------------------|
| Existing Tower Description | Type of change | Modify Existing |
| | Tower Use | Auxiliary (Backup) |
| | Description of Use | Alternate site for WETA |
| | Ownership | Owned |
| | Is this tower consider Complex? | No |
| | Is this tower currently shared with any other stations? | Yes |
| | One or more FM, AM or TV radio broadcaster(s) | Yes |
| | Others Types of Users | Yes |
| | Is tower documented for structural analysis? | Yes |
| | Is tower compliant with Rev G? | No |
| Existing Tower Structure Registration | Do you have a tower registration number? | Yes |
| | ASR Number | 1018169 |
| Coordinates (NAD83 (North American Datum of 1983)) | Latitude (NAD83) | 38° 53' 30.0" N- |
| | Longitude (NAD83) | 077° 07' 54.0" W- |
| | Overall Structure Height | 495.40 feet |
| | Support Structure Height | 492.12 feet |
| | Ground Elevation Above Mean Sea Level (AMSL) | 370.07 feet |
| | Structure Type | LTOWER - Lattice Tower |
| | | |

| | | |
|--|------------------|--|
| | Tower Owner | GREATER WASHINGTON EDUCATIONAL TELECOMMUNICATIONS ASSN DBA = WETA FM |
| | Date Constructed | 02/12/2014 |

**FM, AM or TV radio
broadcasters. Facility ID's,
Call Signs and Services of
other broadcast stations with
whom the tower is shared**

| Facility ID | Call Sign | Service |
|-------------|-----------|---------|
| 4644 | WAVA-FM | FM |
| 12460 | WGTS | FM |
| 65669 | WETA | FM |

Other Types of Users

| Users |
|---------------|
| Trunking |
| Amateur Radio |
| Cellular |

Auxiliary Tower

Tower Modification Costs

| Section | Question | Response |
|-----------------------------|--|-----------------------------------|
| Engineering Study | Please what type of engineering study is required, if any: | Study needed for documented tower |
| Tower Reinforcements | Please select whether tower reinforcements are needed: | Minor Reinforcements needed |

**Auxiliary
Tower**

Tower Rigging Costs

| Section | Question | Response |
|---------------------------------|-----------------------------------|----------|
| Tower Rigging Costs | Complex Tower | N/A |
| Helicopter Services Required | Are helicopter services required? | No |

**Auxiliary
Tower**

Other Tower Expenses Not Listed

Information not provided.

Outside Professional Services Costs

| Section | Question | Response | |
|---|--|--|------|
| Outside Project Management Services | Do you require outside project management services? | Yes | |
| | Number of Hours | 1500 | |
| | Explanation | See attached Budget Justification: Outside Professional Services | |
| Outside RF consulting Engineering Services | Perform engineering study for new channel assignment and antenna development | Yes | |
| | Prepare engineering section of Form FCC Construction Permit Application | Yes | |
| | For Auxiliary Facility | N/A | |
| | For Main Facility | Yes | N /A |
| | Prepare engineering section of Form FCC License to Cover Application | Yes | |
| | For Auxiliary Facility | Yes | |
| | For Main Facility | Yes | |
| | Prepare request for Special Temporary Authority | Yes | |
| | Quantity | 2 | |
| | Do you have Distributed Transmission System engineering services? | N/A | |
| | Critical Facility | N/A | |
| | Terrain-Shielded Facility | N/A | |
| Attorney and Other Outside Consulting Services | Prepare and file Form FCC Construction Permit Application | Yes | |
| | For Auxiliary Facility | Yes | |
| | For Main Facility | Yes | |
| | | | |

| | | |
|--------------------------------------|--|-----|
| | Prepare and file Form FCC License to Cover Application | Yes |
| | For Auxiliary Facility | Yes |
| | For Main Facility | Yes |
| | Prepare request for Special Temporary Authority | Yes |
| | Quantity | 1 |
| | NEPA Section 106 environmental review | No |
| | Environmental Assessment | No |
| | ASR Modification | No |
| | FAA Consultation (including preparation of FAA Form 7460) | No |
| | Negotiation of Lease and other Matter for Shared Locations | Yes |
| | Prepare or Review FCC Form 399 for Reimbursement | Yes |
| | Address transition timing and coordination issues w/ other stations and wireless providers | Yes |
| RF Field Engineering Services | Comprehensive coverage verification via field study | Yes |
| | RF exposure measurements | Yes |
| | Additional Field Engineering Service | No |
| | Number of Days | N/A |
| | Justification | N/A |

**Outside
Professional
Services
Costs**

Other Professional Services Expenses Not Listed

| Name | Description |
|----------------|--|
| Channel change | Engineering services to evaluate coverage and interference moving channel from 14 to 31. |

| | |
|---|---|
| Progress Reporting | Prepare and file 7 required progress reports on FCC Form 2100, Schedule 387 on a quarterly basis with the FCC. |
| Site Visits and Surveys | Site visits to establish what equipment is on premises, where new equipment will be located and do equipment inventory for both main and auxiliary sites. |
| Architect and Engineering services | Planning and layout of new equipment to be installed at main and aux transmitter sites. |

Other Expenses

| Section | Question | Response |
|-------------------------------------|--|----------|
| AM Pattern Disturbance | Is an Impact Study needed? | No |
| | Is Remediation needed? | No |
| Facility Expenses | Name | N/A |
| | Other Distributed Transmission System Expenses Not listed | N/A |
| | Name | N/A |
| | Is Notification of a Medical Facility required as a result of DTV broadcasting? | Yes |
| Permit and Filing Costs | Local Zoning | No |
| | Non-zoning permits | Yes |
| | BLM or NFS Coordination | No |
| | FCC Construction Permit Minor Change | No |
| | FCC License to Cover Application | No |
| | FCC Special Temporary Authority Application | Yes |
| Other Miscellaneous Expenses | Does this relocation require paying Disposal Costs (for equipment and other waste, net of any salvage value)? | Yes |
| | Does this relocation require Equipment Delivery or Handling Charges not otherwise included in individual item costs? | Yes |
| | Does this relocation require Equipment Storage? | Yes |
| | Does this relocation require the Development and Airing of an Announcement regarding an upcoming channel change? | Yes |
| | Does this relocation require MVPD Notification of a Channel Change? | Yes |

| | |
|-----------------------|----------------------------------|
| Other Expenses | Other Expenses Not Listed |
| | Information not provided. |

Cost Information

Transmitters

Where no predetermined cost estimate is available, any estimate provided will also become the predetermined cost (displayed in italics).

| Description | Predetermined Cost Estimate | Estimated Cost | Estimated Cost Justification | Actual Cost | Actual Cost Justification |
|--|-----------------------------|-----------------------|--|---------------|---------------------------|
| Primary Transmitter ULXTE-90 | \$2,221,935.00 | \$2,276,957.00 | | \$0.00 | |
| Pre-installation survey | <i>\$19,725.00</i> | \$19,725.00 | Pre-installation survey by GatesAir to determine requirements for transmitter installation. | N/A | N/A |
| 4" Rigid Conduit and Wiring (Cost per foot) | \$40,320.00 | \$40,320.00 | N/A | N/A | N/A |
| Transformer 3 phase/480v - 500 KVA | \$46,000.00 | \$46,000.00 | N/A | N/A | N/A |
| 50 Ton system | \$253,000.00 | \$253,000.00 | N/A | N/A | N/A |
| Switchgear - industrial 800 amp | \$36,300.00 | \$36,300.00 | N/A | N/A | N/A |
| UHF - Liquid Cooled Solid State Transmitter 52 - 61 kW | \$1,700,000.00 | \$1,755,022.00 | See attached quote. NOTE: Quote shows cost of both main and auxiliary transmitters. See revised narrative. | N/A | N/A |

| | | | | | |
|--|---------------------|---------------------|--|---------------|-----|
| Other -- Building Addition Size: 1000.0 | <i>\$126,590.00</i> | \$126,590.00 | Includes drawing and 3-D laser imaging for initial planning purposes (\$26,590). Includes estimate for structure to be constructed on roof to support transmitter heat exchangers (\$100,000). | N/A | N/A |
| Auxiliary Transmitter ULXTE-20 | \$534,000.00 | \$531,202.54 | | \$0.00 | |
| Other -- Building Addition Size: 600.0 | <i>\$50,000.00</i> | \$50,000.00 | See revised narrative. Remodeling needed to accommodate new transmitter and filter while current transmitter remains operational. | N/A | N/A |

| | | | | | |
|--|-----------------------|-----------------------|--|---------------|------------|
| Other Electrical Service: Electrical contractor to connect transmitter into existing electrical panel and wire heat exchanger into transmitter. Includes material and labor. | <i>\$14,000.00</i> | \$14,000.00 | Electrical contractor to connect transmitter into existing electrical panel and wire heat exchanger into transmitter. Includes material and labor. | N/A | N/A |
| UHF - Liquid Cooled Solid State Transmitter 8.2 - 13 kW | \$470,000.00 | \$467,202.54 | This is an off-site backup to replace what is currently in use. | N/A | N/A |
| Auxiliary Transmitter ULXTE-90 | \$1,740,320.00 | \$1,795,342.00 | | \$0.00 | |
| UHF - Liquid Cooled Solid State Transmitter 52 - 61 kW | \$1,700,000.00 | \$1,755,022.00 | See attached quote. NOTE: Quote shows cost of both main and auxiliary transmitters. See revised narrative. | N/A | N/A |
| 4" Rigid Conduit and Wiring (Cost per foot) | \$40,320.00 | \$40,320.00 | N/A | N/A | N/A |
| Sub-total | \$4,496,255.00 | \$4,603,501.54 | N/A | \$0.00 | N/A |
| Total for all systems | \$5,617,385.00 | \$5,967,961.04 | N/A | \$0.00 | N/A |

Components

Information not provided.

**Cost
Information**

Antennas

Where no predetermined cost estimate is available, any estimate provided will also become the predetermined cost (displayed in italics).

| Description | Predetermined Cost Estimate | Estimated Cost | Estimated Cost Justification | Actual Cost | Actual Cost Justification |
|--|--------------------------------|---------------------|--|----------------|------------------------------|
| Primary Antenna TUP- 04-12-2 | \$86,400.00 | \$129,039.50 | | \$0.00 | |
| Sweep test of existing antenna | \$6,400.00 | \$6,400.00 | N/A | N/A | N/A |
| UHF - High Power Top Mount Three Station broadband panel antenna horizontally polarized | <i>\$0.00</i> | \$0.00 | N/A | N/A | N/A |
| New combiner, cost per channel (without antenna) | \$80,000.00 | \$122,639.50 | WETA Share of a 3 channel combiner. See attached revised narrative: COMBINER as to the overage from catalog cost per station and cost breakout. | N/A | N/A |
| Auxiliary Antenna TFU- 8JSC-RO3 | \$125,800.00 | \$125,800.00 | | \$0.00 | |

| | | | | | |
|---|-------------------------------|----------------|--|--------|-----|
| UHF - High Power, Side Mount, basic slot antenna, 20 kW input, horizontally polarized | <i>\$85,000.00</i> | \$85,000.00 | Catalog cost estimate to replace aux ch. 27 antenna with one for ch. 31. | N/A | N/A |
| Elbow complex, single channel, at antenna input, per 3 1/8. feedline (if needed) | \$7,400.00 | \$7,400.00 | N/A | N/A | N/A |
| Pattern scatter analysis for side mount high /med power antennas (if not included in antenna base cost) | \$5,000.00 | \$5,000.00 | N/A | N/A | N/A |
| Side mount brackets for high power antennas (if not included in antenna base cost) | \$22,000.00 | \$22,000.00 | N/A | N/A | N/A |
| Sweep test of existing antenna | \$6,400.00 | \$6,400.00 | N/A | N/A | N/A |
| Sub-total | \$212,200.00 | \$254,839.50 | N/A | \$0.00 | N/A |
| Total for all systems | \$5,617,385.00 | \$5,967,961.04 | N/A | \$0.00 | N/A |

Components

Information not provided.

Cost
Information

Transmission Line

Where no predetermined cost estimate is available, any estimate provided will also become the predetermined cost (displayed in italics).

| Description | Predetermined Cost Estimate | Estimated Cost | Estimated Cost Justification | Actual Cost | Actual Cost Justification |
|---|--------------------------------|-------------------|--|----------------|------------------------------|
| Primary Transmission Line | \$47,640.00 | \$47,640.00 | | \$0.00 | |
| Rigid Transmission Line - copper, 6 1/8" | \$32,640.00 | \$32,640.00 | N/A | N/A | N/A |
| Installation | <i>\$15,000.00</i> | \$15,000.00 | Estimated replacement to install new 6-1/8" line and remove old 3-1/8" line. | N/A | N/A |
| Auxiliary Transmission Line | \$54,450.00 | \$54,450.00 | | \$0.00 | |
| Rigid Transmission Line - copper, 3 1/8" | \$54,450.00 | \$54,450.00 | N/A | N/A | N/A |
| Sub-total | \$102,090.00 | \$102,090.00 | N/A | \$0.00 | N/A |
| Total for all systems | \$5,617,385.00 | \$5,967,961.04 | N/A | \$0.00 | N/A |

Components

Information not provided.

Cost
Information

Tower Equipment and Rigging Costs

Where no predetermined cost estimate is available, any estimate provided will also become the predetermined cost (displayed in italics).

| Description | Predetermined Cost Estimate | Estimated Cost | Estimated Cost Justification | Actual Cost | Actual Cost Justification |
|--|--------------------------------|-------------------|------------------------------------|----------------|------------------------------|
| Auxiliary Tower LTOWER | \$242,000.00 | \$192,000.00 | | \$0.00 | |
| Short Tower (less than 500') | \$80,000.00 | \$80,000.00 | N/A | N/A | N/A |
| Minor tower reinforcement /modifications | \$150,000.00 | \$100,000.00 | N/A | N/A | N/A |
| Structural engineering tower load study for well documented tower | \$12,000.00 | \$12,000.00 | N/A | N/A | N/A |
| Sub-total | \$242,000.00 | \$192,000.00 | N/A | \$0.00 | N/A |
| Total for all systems | \$5,617,385.00 | \$5,967,961.04 | N/A | \$0.00 | N/A |

Components

Information not provided.

Cost Information

Outside Professional Services

Where no predetermined cost estimate is available, any estimate provided will also become the predetermined cost (displayed in italics).

| Description | Predetermined Cost Estimate | Estimated Cost | Estimated Cost Justification | Actual Cost | Actual Cost Justification |
|--------------------------------------|-----------------------------|---------------------|---|---------------|---------------------------|
| Outside Professional Services | \$494,250.00 | \$748,750.00 | | \$0.00 | |
| Site Visits and Surveys | <i>\$9,000.00</i> | \$9,000.00 | Site visits to establish what equipment is on premises, where new equipment will be located and do equipment inventory for both main and auxiliary sites. | N/A | N/A |
| Progress Reporting | <i>\$14,000.00</i> | \$14,000.00 | Prepare and file 7 required progress reports on FCC Form 2100, Schedule 387 on a quarterly basis with the FCC. | N/A | N/A |
| Channel change | <i>\$85,000.00</i> | \$85,000.00 | Engineering services to evaluate coverage and interference moving channel from 14 to 31. | N/A | N/A |

| | | | | | |
|---|-------------|--------------|---|-----|-----|
| Comprehensive coverage verification via field study, if needed | \$80,000.00 | \$100,000.00 | \$80,000 for Main transmitter site and \$20,000 for auxiliary site. | N/A | N/A |
| Attorney Fees - Negotiation of lease and other matters for shared locations | \$4,000.00 | \$175,000.00 | Fees related to multi-party resolution agreement between 3 parties to accommodate WETA moving from ch 14 to 31, 100,000. Lease mod negotiations for main ant /combiner and bldg. permit app., 50,000. Aux site apps and hearings for bldg expansion 25,000. | N/A | N/A |
| Prepare request for Special Temporary Authorization | \$3,000.00 | \$3,000.00 | Two STA's are anticipated, one for the main site and the other for the auxiliary. | N/A | N/A |

| | | | | | |
|---|------------|-------------|--|-----|-----|
| Address transition timing and coordination issues w/ other stations and wireless | \$2,500.00 | \$11,000.00 | Coordination with 4 TV stations and 3 FM stations. Cut over must be carefully planned with other two stations. Contacting Land Mobile operators on cutover to ensure no interference by WETA | N/A | N/A |
| Perform engineering study for new channel assignment and antenna development | \$7,000.00 | \$45,000.00 | Extensive study has already been given to searching for a new channel and Land Mobile interference and remediation with WETA on ch. 14. Additional studies for multi-station resolution had to be performed. | N/A | N/A |
| RF Consulting Engineer Fees- Aux Antenna: Prepare engineering section of FCC Form 2100, Construction Permit Application | \$2,000.00 | \$3,000.00 | Time required will be similar to that required of the main site to prepare this application. | N/A | N/A |

| | | | | | |
|--|---------------------------|-------------|---|-----|-----|
| Prepare engineering section of FCC Form 2100 (main), License to Cover Application | \$1,500.00 | \$1,500.00 | N/A | N/A | N/A |
| RF Consulting Engineer Fees- Aux Antenna: Prepare engineering section of FCC Form 2100, License to Cover Application | \$1,500.00 | \$1,500.00 | N/A | N/A | N/A |
| Architect and Engineering services | <i>\$19,500.00</i> | \$19,500.00 | Planning and layout of new equipment to be installed at main and aux transmitter sites. | N/A | N/A |
| Prepare engineering section of FCC Form 2100 (main), Construction Permit Application | \$3,000.00 | \$3,000.00 | N/A | N/A | N/A |
| Attorney Fees - Prepare and File FCC Form 2100 (main), Construction Permit Application | \$5,000.00 | \$5,000.00 | N/A | N/A | N/A |

| | | | | | |
|---|--------------|--------------|--|-----|-----|
| Attorney Fees - Aux Antenna, prepare and File Form 2100 Construction Permit or License Application | \$4,000.00 | \$4,000.00 | N/A | N/A | N/A |
| Attorney Fees - Prepare and File FCC Form 2100 (main), License to Cover Application | \$2,250.00 | \$2,250.00 | N/A | N/A | N/A |
| Attorney Fees - Prepare and File request for Special Temporary Authorization | \$3,500.00 | \$7,000.00 | The need for filing two STA's in a project of this magnitude is anticipated. | N/A | N/A |
| Prepare and or review reimbursement form | \$2,500.00 | \$15,000.00 | This is a complex project and requires careful attention to detail in assembling. Substantial time has been placed into the preparation of the form with supporting justification for both main and auxiliary sites. | N/A | N/A |
| RF Exposure Measurements | \$20,000.00 | \$20,000.00 | N/A | N/A | N/A |
| Project management of the transition | \$225,000.00 | \$225,000.00 | N/A | N/A | N/A |

| | | | | | |
|------------------------------|----------------|----------------|-----|--------|-----|
| Sub-total | \$494,250.00 | \$748,750.00 | N/A | \$0.00 | N/A |
| Total for all systems | \$5,617,385.00 | \$5,967,961.04 | N/A | \$0.00 | N/A |

Components

Information not provided.

Cost Information

Other Expenses

Where no predetermined cost estimate is available, any estimate provided will also become the predetermined cost (displayed in italics).

| Description | Predetermined Cost Estimate | Estimated Cost | Estimated Cost Justification | Actual Cost | Actual Cost Justification |
|--|-----------------------------|--------------------|---|---------------|---------------------------|
| Other Expenses | \$70,590.00 | \$66,780.00 | | \$0.00 | |
| Disposal Costs (for equipment and other waste, net of any salvage value) | <i>\$1,000.00</i> | \$1,000.00 | Some disposal costs are anticipated for old equipment removed from service. This modest amount is proposed for such disposal. | N/A | N/A |
| Equipment Storage | <i>\$10,000.00</i> | \$10,000.00 | See attached Budget Justification: FEES AND MISCELLANEOUS EXPENSES | N/A | N/A |
| FCC Filing Fees - Special Temporary Authorization request | \$190.00 | \$380.00 | Anticipate needing to file two STA's in a project this complex. | N/A | N/A |
| MVPD Notification of Channel Change | <i>\$7,000.00</i> | \$7,000.00 | Estimated cost of using outside firm to contact MVPD's regarding channel change to repack channel. | N/A | N/A |
| Develop and air announcement of upcoming channel change | <i>\$7,500.00</i> | \$7,500.00 | Costs for production and airtime of channel change announcements. | N/A | N/A |

| | | | | | |
|---|--------------------|----------------|--|--------|-----|
| Non-zoning permits | <i>\$5,000.00</i> | \$5,000.00 | Estimate of building permit costs to modify auxiliary transmitter site and extensive electrical work at main site. | N/A | N/A |
| Equipment Delivery and Handling Charges | <i>\$28,900.00</i> | \$28,900.00 | Estimated freight charges for multiple transmitters and auxiliary antenna not included in quotations for equipment from vendors. See transmitter quotes for those estimates. | N/A | N/A |
| DTV Medical Facility Notification | \$11,000.00 | \$7,000.00 | N/A | N/A | N/A |
| Sub-total | \$70,590.00 | \$66,780.00 | N/A | \$0.00 | N/A |
| Total for all systems | \$5,617,385.00 | \$5,967,961.04 | N/A | \$0.00 | N/A |

Components

Information not provided.

| | | | | |
|------------------|-----------------------|-----------------------------|----------------|-------------|
| Cost Information | Grand Total | | | |
| | | Predetermined Cost Estimate | Estimated Cost | Actual Cost |
| | Total for all systems | \$5,617,385.00 | \$5,967,961.04 | \$0.00 |

| | | |
|---------------------|---------------------------|----------|
| Construction Status | Question | Response |
| | Is construction complete? | No |

| Certification | Section | Question | Response |
|---------------|---|---|----------|
| | Submission of Estimated Expenses Statements | <p>WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND /OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a) (1), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503), AND ANY FALSE STATEMENTS COULD SUBJECT THIS ENTITY TO LIABILITY UNDER THE FALSE CLAIMS ACT.</p> | |
| | | <ol style="list-style-type: none"> 1. The Authorized Person signing below certifies that he /she is authorized to submit this TV Broadcaster Relocation Fund Reimbursement Form on behalf of the above-named entity. 2. The above-named entity acknowledges that all certifications and attached documentation are considered material representations. 3. The above-named entity acknowledges the submission of the information herein creates no obligation on the part of the government to pay any amount. | |

4. The above-named entity certifies that the equipment and services paid for with money from the TV Broadcaster Relocation Fund are necessary to change channels (broadcasters) or to continue to carry the signal of a broadcaster that changes channels (MVPD).
5. The above-named entity certifies that all payments from the TV Broadcaster Relocation Fund (Fund) received by the entity listed on this form will be used only for expenses that are eligible for reimbursement from the Fund.
6. The above-named entity certifies that it will maintain and provide to the Commission detailed records, including receipts, of all costs eligible for reimbursement actually incurred.
7. The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission.

| | | |
|--|---|--|
| | <p>8. The above-named entity certifies that it is in full compliance with all statutes, rules, regulations and governmental requirements for which compliance is a pre-requisite for obtaining the payments herein requested.</p> | |
| | <p>I declare, under penalty of perjury, that I am an authorized representative of the above-named applicant for the Authorization(s) specified above.</p> | <p>Lisa Lindstrom Delaney <i>Senior VP and General Counsel</i></p> <p>09/28/2017</p> |

| Certification | Section | Question | Response |
|---------------|--|--|----------|
| | Submission of Actual Cost Documentation Statements | <p>WILLFUL FALSE STATEMENTS ON THIS FORM ARE PUNISHABLE BY FINE AND /OR IMPRISONMENT (U.S. CODE, TITLE 18, SECTION 1001), AND/OR REVOCATION OF ANY STATION LICENSE OR CONSTRUCTION PERMIT (U.S. CODE, TITLE 47, SECTION 312(a) (1), AND/OR FORFEITURE (U.S. CODE, TITLE 47, SECTION 503), AND ANY FALSE STATEMENTS COULD SUBJECT THIS ENTITY TO LIABILITY UNDER THE FALSE CLAIMS ACT.</p> | |
| | | <ol style="list-style-type: none"> 1. The Authorized Person signing below certifies and represents that he /she is authorized to submit this TV Broadcaster Relocation Fund Reimbursement Form on behalf of the above-named entity. The above-named entity acknowledges that all certifications and attached documentation are considered material. 2. The above-named entity acknowledges the submission of the information herein creates no obligation on the part of the government to pay any amount. | |

3. The above-named entity certifies that the equipment and services paid for with money from the TV Broadcaster Relocation Fund are necessary to change channels (broadcasters) or to continue to carry the signal of a broadcaster that changes channels (MVPD).
4. The above-named entity certifies that all payments from the TV Broadcaster Relocation Fund (Fund) received by the entity listed on this form will be used only for expenses that are eligible for reimbursement from the Fund.
5. The above-named entity certifies that the cost information /documents submitted reflect costs actually incurred.
6. The above-named entity acknowledges that overpayments or payments in error must be promptly refunded to the Commission.
7. The above-named entity certifies that it is in full compliance with all statutes, rules, regulations and governmental requirements for which compliance is a pre-requisite for obtaining the payments herein requested.

I declare, under penalty of perjury, that I am an authorized representative of the above-named applicant for the Authorization(s) specified above.

**Lisa
Lindstrom
Delaney**
*Senior VP
and
General
Counsel*

09/28/2017

Attachments